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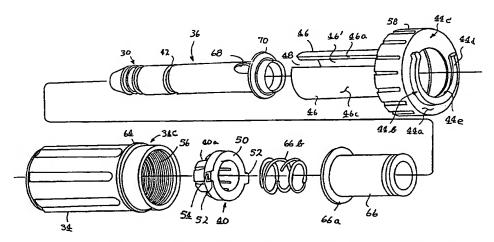
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(54) Title: FLUID COUPLING WITH ROTARY ACTUATION



(57) Abstract: A two-part coupling structure (22, 32) includes a male coupling part (32) and a female coupling part (22) which are mutually engageable to open fluid communication between the coupling parts (22,32). For example, the coupling parts (22, 32) may be used to establish fluid communication between a container (12) and a conduit (14). The coupling parts (22, 32) are disengageable from one another to discontinue fluid communication between them, and also to close communication between ambient and each of the container (12) and the conduit (14). The male coupling part (32) includes a mounting structure (44a-44e) for supporting on the female coupling part (32), and also includes a guide structure (44) effective to guide a male probe portion (36) of the male coupling part (32) into engagement with the female coupling part (22). A rotary actuator member (34), preferably in the form of a handnut is included in the male coupling part (32), and is effective upon rotation of cause axial relative movement of the male probe portion (36) into or out of engagement with the female coupling part (22). A considerably lowered manual engagement and disengagement force is provided, along with increased convenience and ease of use for the coupling structure.



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